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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,528	02/25/2002	Mark W. Lambert	31008.P037	9800
26181	7590	07/14/2005	EXAMINER	
FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			ORTIZ RODRIGUEZ, CARLOS R	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,528

Applicant(s)

LAMBERT ET AL.

Examiner

Carlos Ortiz-Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk U.S. Patent No. 5,255,352 in view of Badding et al. U.S. Patent No. 6,526,550.

Regarding claims 1, 4-12, 15-23, and 26-33 Falk discloses a method comprising: receiving an input corresponding to generation of a pattern in a computer aided design (CAD) geometry piece (Abstract L1-5), and receiving an indication of modification to the CAD geometry piece (C3 L1-31).

But, Falk fails to clearly specify at least one of the pattern and the plurality of features to be continuously included within the boundary of the modified CAD geometry piece.

However, Badding et al. discloses the pattern comprising a plurality of features included within a boundary of the CAD geometry piece (C5 L20-36); automatically modifying the CAD geometry piece and its boundary based at least upon the received indication (C3 l3-25); and automatically modifying at least one of the pattern and the plurality of features to be

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continuously included within the boundary of the modified CAD geometry piece, based at least upon the modified CAD geometry piece and the received input (C5 L20-36 and C8 L30-56).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Falk and combining it with the invention disclosed by Badding et al. The results of this combination would lead to method and apparatus for simplified patterning of features in a computer aided design (CAD) model. One of ordinary skill in the art would have been motivated to do this modification in order to obtain generate new solutions corresponding to the altered/modified geometry as suggested by Badding et al.

Regarding claims 2, 13, 24, Falk in combination with Badding et al. disclose all the limitations of the base claim. Falk in combination with Badding et al. further disclose wherein said receiving the input comprises receiving an input corresponding to an indication of a direction, the indication having an X-component and a Y-component (see Falk C3 L5-8 and C10 L30-40).

Regarding claims 3, 14, 25, Falk in combination with Badding et al. disclose all the limitations of the base claim. Falk in combination with Badding et al. further disclose wherein said receiving the input comprises receiving a boundary value, the boundary value having at least one of a maximum value and a minimum value for the plurality of features to be adjacent said boundary (see Badding et al. C11 L28-49).

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to method and apparatus for simplified patterning of features in a computer aided design (CAD) model:

- a. U.S. Pat. No. 4,736,306 to Christensen et al., which discloses system for conversion between the boundary representation model and a constructive solid geometry model of an object.
- b. U.S. Pat. No. 6,128,020 to Arimatsu et al., which discloses computer system supporting design operation of three-dimensional object and method thereof.
- c. U.S. Pat. No. 6,337,685 to Nagakura, which discloses three-dimensional model generation system, three-dimensional model generation method, and recording medium storing a three-dimensional model generation program.
- d. U.S. Pat. No. 6,542,937 to Kask et al., which discloses apparatus and method for transferring and editing sheet metal part data.
- e. U.S. Pat. No. 6,810,295 to Hochenauer et al., which discloses method and apparatus for simplified generation and displaying of cutout features of computer aided design model.
- f. U.S. Pat. No. 6,895,371 to Ames et al., which discloses geometrical modeling of structural products.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (571) 272-3747. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703)308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carlos Ortiz-Rodriguez
Patent Examiner
Art Unit 2125

cror

July 11, 2005

Albert W. Paladini 7-11-05
ALBERT W. PALADINI
PRIMARY EXAMINER